

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) A packet switched communications system having a dynamic voice jitter buffer for use with voice over Internet protocol (VoIP) packets comprising: a source for transmitting at least one a plurality of VoIP packets for a call;
at least one router for routing the VoIP packets to a specified destination;
a destination for receiving ~~the at least one~~ the plurality of VoIP packets for the call; and
at least one router for routing the plurality of VoIP packets for the call from the source to the destination.

wherein at least one of the plurality of VoIP packets for the call ~~operates to~~ conveys congestion information regarding the packet switched communications system ~~to at least one buffer located at the destination, and wherein a size of the dynamic voice jitter buffer is set based on the congestion information conveyed in the at least one of the plurality of VoIP packets for the call.~~

2. (currently amended) ~~A~~ The packet switched communications system as in claim 1, wherein the at least one of the plurality of VoIP packets conveys congestion information ~~comprising comprises the steps of:~~

~~setting the~~ a time-to-live (TTL) field in the VoIP packet that is set to a predetermined value;

wherein the predetermined value of the TTL field is decremented ~~decrementing the TTL value by one count each time as it the VoIP packet traverses each respective a router in the packet switched communications system;~~ and wherein the size of the dynamic voice jitter buffer is set based on calculating the number of routers the VoIP packet has ~~passed through~~ traversed based on a final TTL value determined at the destination; ~~and~~

adjusting the capacity of the at least one buffer at the destination based on the final TTL value in order to mitigate non-periodic receipt of incoming VoIP packets at the destination.

3. (canceled)

4. (currently amended) ~~A-The~~ packet switched communications system as in claim 1, wherein at least one of the plurality of VoIP packets conveys congestion information comprising comprises the steps of:

determining the speed upon which the VoIP packet has been received at the at least one router;

setting at least one field in the VoIP packet that is set to indicate if the VoIP packet has traversed at least one previous router at a speed below a predetermined speed, and wherein the size of the dynamic voice jitter buffer is set; and

adjusting the capacity of at least one buffer at the destination based upon recognition of whether the at least one field is set in order to mitigate non-periodic receipt of incoming VoIP packets at the destination.

5. (currently amended) ~~A-The~~ packet switched communications system as in claim 4, further including the step of: wherein

setting the at least one field within in the VoIP packet is set with a congestion value based upon the a speed of the an originating link.

6. (currently amended) ~~A-The~~ packet switch communications systems as in claim 4, further including the step of: wherein

setting the at least one field within in the VoIP packet is set with a congestion value based upon the at least one of a speed of the a destination link, or a speed of a link immediately preceding the destination link.

7. (currently amended) ~~A~~The packet switched communications system as in claim 1, further including the step of:

~~selecting a first, second or third capacity wherein the size of the dynamic voice jitter buffer is set of the at least one congestion value to a first size if the congestion information is at or below a first threshold, and wherein the size of the dynamic voice jitter buffer is set to a second size if the congestion information is at or below a second threshold and above the first threshold, and wherein the size of the dynamic voice jitter buffer is set to a third size if the congestion information is above the second threshold.~~

8. (canceled)

9. (canceled)

10. (currently amended) A method for ~~adjusting the setting a~~ size of a jitter buffer ~~for a call~~ for use in a ~~voice over Internet protocol (VoIP)~~ packet switched communications system comprising the steps of:

receiving a plurality of voice over Internet protocol (VoIP) packets for the call, wherein at least one of the plurality of VoIP packets comprises

adjusting the a time-to-live (TTL) field in a VoIP packet to set to a predetermined value at a source;

decrementing the TTL field that is decremented by at least one count each time the VoIP packet traverses a router in the VoIP packet switched communication system;

reading a final value of the TTL field at a destination; and

adjusting the setting the size of a the jitter buffer based upon the TTL final value of the TTL field in order to mitigate the effect of receipt of non-periodic VoIP packets at the destination device.

11. (canceled)

12. (currently amended) A ~~The method for adjusting the size of a jitter buffer as in claim 10, wherein the step of setting the size of the jitter buffer comprises;~~ further includes the steps of:

comparing the predetermined value of the TTL field with the final value of the TTL field read at the destination to produce a compared value; and

~~mapping the compared value to a predetermined jitter buffer capacity; setting the size of the jitter buffer based upon the compared value to provide a substantially continuous flow of VoIP packets from jitter buffer.~~

13. (currently amended) A ~~The method for adjusting the size of the jitter buffer as in claim 12, further comprising wherein~~ the step of: setting the capacity-size of the jitter buffer to either further comprises setting the jitter buffer to a first size if the compared value is at or below a first value, and setting the size of the jitter buffer to a second size if the compared value is at or below a second value and above the first value, and setting the size of the jitter buffer to a third size if predetermined capacity-based upon the compared value is above the second value.

14. (currently amended) A method for ~~adjusting the~~ setting a size of a jitter buffer for a call for use with a packet switched communications system ~~network transmitting voice over Internet protocol (VoIP) packets based upon transmission path delay~~ comprising the steps of:

receiving a plurality of voice over Internet protocol (VoIP) packets for the call, wherein at least one of the plurality of VoIP packets comprises a field for indicating determining the an amount of transmission delay through a transmission path that a the VoIP packet has encountered upon receipt by at least one router in the packet-network; switched communications system, such that the field is setting a field within the VoIP packet set when the at least one of the following events occurs; transmission rate for a link used for the VoIP VoIP packet is below a predetermined threshold or congestion of a link exceeds a predetermined threshold;

recognizing determining whether the field at a destination of the VoIP packet is set; and adjusting setting the size of a the jitter buffer based upon recognition of whether the field is set in order to mitigate the effect of receipt of non-periodic VoIP VoIP packets at the destination device.

15. (canceled)

16. (currently amended) A ~~The method for adjusting the size of a jitter buffer as in claim 14, further including the steps of:~~

~~setting wherein the field is set using a numeric value based upon the amount of transmission path delay; and wherein the step of setting the jitter buffer comprises mapping the numeric value into a minimal jitter buffer size required for that amount of transmission delay.~~

17. (currently amended) A ~~The method for adjusting the size of the jitter buffer as in claim 14~~ 16, further comprising wherein the step of: adjusting setting the size of the jitter buffer to either further comprises setting the jitter buffer to a first size if the numeric value is at or below a first value, and setting the size of the jitter buffer to a second size if the numeric value is at or below a second value and above the first value, and setting the size of the jitter buffer to a third size of capacity based upon the numeric value is above the second value set within the field.

18. (canceled)

19. (canceled)

20. (canceled)

21. (canceled)

22. (new) The packet switched communications system as in claim 1, wherein the jitter buffer is located at the destination.

23. (new) In a packet switched communications system having at least a source device, a destination device, and at least one router, the destination device comprising:

a receiver for receiving a plurality of voice over Internet protocol (VoIP) packets for a call from the source device via the at least one router, wherein at least one of the plurality of VoIP packets for the call conveys congestion information to the destination device regarding the packet switched communications system; and

a jitter buffer for mitigating the non-periodic receipt of VoIP packets, wherein a size of the jitter buffer is set based on the congestion information conveyed in the at least one of the plurality of VoIP packets for the call.

24. (new) The destination device as in claim 23, wherein the at least one of the plurality of VoIP packets comprises a time-to-live (TTL) field that is set to a value, wherein the value of the TTL field is decremented by one count each time the VoIP packet traverses a router in the packet switched communications system, and wherein the size of the jitter buffer is set based on calculating the number of routers the VoIP packet has traversed based on a final TTL value determined at the destination device.

25. (new) The destination device as in claim 23, wherein at least one of the plurality of VoIP packets comprises at least one field that is set to indicate if the VoIP packet has traversed at least one router at a speed below a predetermined speed, and wherein the size of the jitter buffer is set based upon whether the at least one field is set.

26. (new) The destination device as in claim 25, wherein the at least one field in the VoIP packet is set with a congestion value based upon a speed of an originating link.

27. (new) The destination device as in claim 26, wherein the size of the jitter buffer is set based upon the congestion value set within the at least one field.

28. (new) The destination device as in claim 25, wherein the at least one field in the VoIP packet is set with a congestion value based upon at least one of a speed of a destination link, or a speed of a link immediately preceding the destination link .

29. (new) The destination device as in claim 28, wherein the size of the jitter buffer is based upon the congestion value set within the at least one field.

30. (new) The destination device as in claim 23, wherein the size of the jitter buffer is set to a first size if the congestion information is at or below a first threshold, and wherein the size of the jitter buffer is set to a second size if the congestion information is at or below a second threshold and above the first threshold, and wherein the size of the jitter buffer is set to a third size if the congestion information is above the second threshold.